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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO... |
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10/649,616

08/28/2003

Koji Ohira

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12/14/2005

STAAS & HALSEY LLP

SUITE 700

1201 NEW YORK AVENUE, N.W.

WASHINGTON, DC 20005

EXAMINER

HARRISON, CHANTE E

ART UNIT

PAPER NUMBER

2677

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/649,616

Applicant(s)

OHIRA ET AL.

Examiner

Chante Harrison

Art Unit

2677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/28/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>8/28/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement filed 8/28/03 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiroshi Ohtaka et al., US 6,151,000, 11/2000.

As per independent claim 1, Ohtaka discloses replacing one frame with first sub-frames for lighting only an area other than a part of a screen (i.e. a small display area at the center of the display is divided into sub-frames that are driven to control the luminance in the central display area) (Fig. 8a "611"; Fig. 8b "621"; Fig. 7a & b; col. 8, ll. 45-56) and a second sub-frame (Fig. 7b "SF1 & SF2") for lighting only a section of the screen other than the area (i.e. scanning periods 121 and 122 correspond to the display areas 622 and 623, e.g. black bands, which are driven to have fewer display gradations) (Fig. 8b; col. 8, ll. 5-18) when the area is used to display a picture having an aspect ratio different from that of the screen (i.e. input image data having a signal format is displayed in a display having a different number of scanning lines) (col. 6, ll. 42-63; col. 8, ll. 18-27); and controlling luminance in the first sub-frames and luminance in the second sub-frame independently of each other (i.e. setting the scanning period and controlling the scanning pulse to control the display gradations of selected display areas) (col. 7, ll. 50-65; col. 8, ll. 1-13, 32-41).

As per dependent claims 2 and 8, Ohtaka discloses wherein amount of light emission of each cell in display of the second sub-frame is fixed (i.e. electrodes of the non-display areas, which correspond to the second sub-frame, are at a fixed voltage) (col. 6, ll. 15-

20) and amount of light emission of each cell in display of the first sub-frames is adjusted depending on variation in brightness of a picture (col. 9, ll. 10-25) so that power consumption of the plasma display panel avoids exceeding a set value (i.e. controlling the pulse generation to avoid a capacitive load and power loss) (col. 9, ll. 24-34).

As per dependent claims 3 and 9, Ohataka discloses assigning a reset period for equalizing wall charge in a plurality of cells (i.e. stabilizing the discharge using a reset period) (col. 5, ll. 58-60), an address period for associating the wall charge in each of the cells with display data (i.e. address pulse generators) (col. 1, ll. 40-43; col. 5, ll. 24-25) and a display period for generating display discharge to the second sub-frame and each of the first sub-frames (i.e. sustaining pulse generators) (col. 2, ll. 19-21; col. 5, ll. 24-28; Fig. 7 "sustaining period" from the 1st to the Nth line); and making the reset period in the second sub-frame shorter than the reset period in each of the first sub-frames (i.e. reset period is longer when only the center display area having the most gradations is displayed) (Fig. 12a & b).

As per dependent claims 4 and 10, Ohtaka discloses assigning a reset period for equalizing wall charge in a plurality of cells (i.e. stabilizing the discharge using a reset period) (col. 5, ll. 58-60), an address period for associating the wall charge in each of the cells with display data (i.e. address pulse generators) (col. 1, ll. 40-43; col. 5, ll. 24-25) and a display period for generating display discharge to each of the first sub-frames

(i.e. sustaining pulse generators) (col. 2, ll. 19-21; col. 5, ll. 24-28; Fig. 7 "sustaining period" from the 1st to the Nth line); assigning an address period for associating wall charge in each cell with display data (i.e. address pulse generators) (col. 1, ll. 40-43; col. 5, ll. 24-25) and a display period for generating display discharge to the second sub-frame (i.e. sustaining pulse generators) (col. 2, ll. 19-21; col. 5, ll. 24-28; Fig. 7 "sustaining period" from the 1st to the Nth line).

As per dependent claims 5 and 11, Ohtaka discloses assigning an address period for associating wall charge in each cell with display data (i.e. address pulse generators) (col. 1, ll. 40-43; col. 5, ll. 24-25) and a display period for generating display discharge to the second sub-frame and each of the first sub-frames (i.e. sustaining pulse generators) (col. 2, ll. 19-21; col. 5, ll. 24-28; Fig. 7 "sustaining period" from the 1st to the Nth line); and generating address discharge in a plurality of rows simultaneously during the address period in the second sub-frame (col. 1, l. 44-46; col. 8, ll. 13-14).

As per dependent claims 6 and 12, Ohtaka discloses wherein amount of light emission of each cell in display of the second sub-frame is adjusted depending on variation in brightness of a picture (col. 8, ll. 1-13; col. 9, ll. 15-30).

As per independent claim 7, Ohtaka discloses replacing a frame selected in accordance with a set rule with first sub-frames for lighting only an area other than a part of a screen (i.e. a small display area at the center of the display is selected and divided into sub-

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frames that are driven to control the luminance in the central display area) (col. 6-7, ll. 65-11; Fig. 8a "611"; Fig. 8b "621"; Fig. 7a & b; col. 8, ll. 45-56) ...; replacing unselected frames with the first sub-frames (i.e. the same first sub-frames are processed for gradation display at each frame from the 1st to the Nth line of the display) (Fig. 7 & 8) the rationale as applied in the rejection of claim 1 applies herein.

As per independent claim 13, Ohtaka discloses a data processing circuit (Fig. 9 "303") and a controller (Fig. 9 "306"). The rationale as applied in the rejection of claim 1 applies herein.

As per independent claim 14, Ohtaka discloses a data processing circuit (Fig. 9 "303") and a controller (Fig. 9 "306"). The rationale as applied in the rejection of claim 7 applies herein.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chante Harrison whose telephone number is 571-272-7659. The examiner can normally be reached on Monday, Tuesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on 571-272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chante Harrison
Examiner
Art Unit 2677

Ch
December 6, 2005

AMR A. AWAD
PRIMARY EXAMINER
